## PROCEEDINGS

OF THE

BIOLOGICAL SOCIETY OF WASHINGTON

## A NEW SALAMANDER FROM MEXICO.

## BY E. R. DUNN.

Last August, while Mr. Prescott Townsend and myself were collecting in the vicinity of Jalapa, we took five specimens of a small salamander which seems undescribed.

## Oedipus townsendi, sp. nov.

*Type:* Mus. Comp. Zool. 8017, adult male, Aug. 20, 1921. E. R. Dunn and Prescott Townsend, collectors.

Type locality: Cerro de los Estropajos near Jalapa, Vera Cruz, Mexico.

*Range:* Known only from type locality and from Guerrero, in the state of Hidalgo.

*Diagnosis:* A small *Oedipus* with inner and outer toes rudimentary; nostrils large in adult; teeth on maxilla; vomerine series of six teeth, not extending beyond nares; four to five costal folds between appressed toes.

Description: Type, 13 costal grooves; 5 costal folds between appressed toes; head width 5 in length from snout to vent; head length 4¼ in length of body; head a blunt oval; eye longer than its distance from tip of snout; nostril very large, its diameter half that of pupil; snout swollen; outline of upper jaw straight as seen from side; angle of jaw back of hind angle of eye; both eyelids fitting under a fold of skin behind; a groove from eye to gular fold; a branch from this down behind angle of jaw; limbs weak; fingers 3, 2, 4, 1, in order of length, tips of third and second free, first and fourth completely in web; toes 3, 4, 2, 5, 1 in order of length, tips of third, fourth and second free, first and fifth completely in web; tail as long as head and body, constricted at base, circular in cross-section; anal lips lined with papillae. Vomerine series not continuous with parasphenoids, 6 teeth in series, beginning behind inner edge of nares, curving in and back to meet its fellow, from which it is separated by no more interval than exists between two teeth of the same series, separated from parasphenoids by its own length; latter in a single patch beginning at middle of eyesocket; teeth on maxilla to anterior edge of eyesocket; an enlarged tooth on premaxilla does not pierce lip. Dark greenish above; black below; blackish V-shaped markings, apex forward, on back and on upper surface of tail; an indistinct light line on each side of back, most prominent above inser-

2-PROC. BIOL. SOC. WASH., VOL. 35, 1922.

tions of arms and legs; a light line across head between hind borders of eyelids; irregular white markings on sides between insertions of legs, and on sides and lower surface of tail; white dots on throat; limbs mottled black and gray.

Total length 42, head 4, body 17, tail 21 mm.

Variation: A male, Mus. Comp. Zool. 8018, from Guerrero, Hidalgo, Mex., has 4 costal folds between appressed toes; tail shorter than body; head width 6 in length from snout to vent; head length 3 7–10 in length of body; an enlarged tooth on premaxilla pierces lip; dull grayish, lighter below; white dots on sides; a trace of lighter above insertions of arms.

Total length 40.5, head 5, body 18.5, tail 17.

A female, Mus. Comp. Zool. 8020, same data as type, has head length 4 in length of body; no anal papillae; paraphenoids separated from vomerines by  $\frac{2}{3}$  length of latter; a light reddish streak from eye nearly to leg, widest above arm where it extends across back to meet its fellow of the opposite side; above this a dark streak and middle of back light reddish with dark V's. Otherwise like type.

Total length 37, head 3.5, body 14.5, tail 18.

Two other females, same data as type, agree with it in color.

8019 Total length 40, head 4, body 18, tail 18.

8021 Total length 38, head 4, body 16, tail 18.

No. 8019 is filled with the yolk masses of large eggs and is fully adult.

Habits: Five were taken on the heavily wooded Cerro de los Estropajos (between Jalapa and the hamlet of San Andres, and only a few miles from the former), altitude about 5000 feet. One was under a piece of wood on the ground and the others were under the bark of logs.

*Remarks*: While this smallest of all salamanders belongs to a group which contains six species, and which ranges from Mexico to Costa Rica, there is little danger of confusion save with one form, *pennatulus*. These two alone have the enlarged nostrils and the rudimentary feet. But *pennatulus* differs in having: no teeth on the maxilla; 6 costal folds between appressed toes; tail longer than head and body; a brown dorsal stripe and black sides.

U. S. N. M. No. 30352 is *O. townsendi*. The locality given is "Tehuantepec?, Sumichrast?." In view of the fact that *pennatulus* is more an animal of high mountains, and that Sumichrast recorded it from Cerro de la Defensa, near Cordoba, Vera Cruz, his record probably refers to *townsendi*, and possibly the National Museum specimen with uncertain locality is his basis for this record,